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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,460	04/06/2001	William R. Mass	279.308US1	6907

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER

KHAN, OMAR A

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 02/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/828,460

Applicant(s)

MASS ET AL.

Examiner

Omar A Khan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/19/2002 have been fully considered but they are not persuasive. Weijand discloses a BPSK reflected impedance transmitter/receiver system having all of the claimed limitations throughout the specification but particularly in column 5, lines 1-15, column 6, lines 43-56, and column 15, lines 60-67. It is inherent that a reflected impedance antenna system adjusts the impedance of the antenna in a time-varying manner so as to modulate the radio frequency carrier signal reflected therefrom in accordance with the message data as is well known in the art and disclosed in the prior art made of record but not relied upon, particularly 5,466,246 and 4,681,111 to Sylvian.

In response to applicant's argument that Weijand does not disclose a transmitter/receiver using far-field radiation, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9, 10, and 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Weijand et al (US Patent No 5,999,857). The dimensions of the antenna and the frequency of the radio frequency carrier signal suggested by Weijand are capable of meeting the functional use limitations presented in the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weijand et al (US Patent No 5,999,857). Weijand discloses all of the claimed limitations but does not explicitly speak to modulation with QPSK. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the passive, reflected impedance transmitter and receiver apparatus of Weijand to include modulation of the RF carrier signal with QPSK since it was well known in the art that QPSK systems require only low power and are capable of

operating at a relatively higher data rate while retaining a high degree of accuracy due to the splitting of the signal into in-phase and quadrature phase components.

4. Claims 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weijand discloses all of the claimed limitations but does not explicitly speak to a clock signal embedded in the RF carrier signal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the passive, reflected impedance transmitter and receiver apparatus of Weijand to include a clock signal embedded in the RF carrier signal since it was well known in the art to periodically modulate an RF carrier signal with a clock signal (or alignment symbols) for providing the receiver with a synchronized reference carrier signal to demodulate the incoming modulated signal.

5. Claims 12-15, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weijand et al (US Patent No 5,999,857). Weijand discloses all of the claimed limitations but does not explicitly speak to a differential PSK or QPSK modulation scheme. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the passive, reflected impedance transmitter and receiver apparatus of Weijand to include modulation of the RF carrier signal with differential PSK or QPSK since it was well known in the art that differential PSK or QPSK allows a coherent detection strategy that does not require a complicated carrier phase recovery subsystem and thus, one ordinary skill would use differential PSK or QPSK to have a simpler receiver system.

Conclusion

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6. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. US Patent 4,681,111 to Silvian

US Patent 5,466,246 to Silvian

US Patent 6,236,889 to Soykan et al

US Patent 6,301,504 to Silvian

US Patent Publication 2002/0151770 to Noll, III et al

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar A Khan whose telephone number is (703) 308-0959. The examiner can normally be reached on M-F 9AM-6PM.


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The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0873.


2/4/03

Omar A Khan
February 4, 2003


GEORGE R. EVANISKO
PRIMARY EXAMINER
2/6/3